



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 01 2011

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Justin Prien
Environmental Manager
Solutia Inc.
W.G. Krummrich Plant
500 Monsanto Avenue
Sauget, Illinois 62206-1198

RE: Finding of Violation
Solutia Inc., Sauget, Illinois

Dear Mr. Prien:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Solutia Inc. (you). We find that you are in violation of Section 112 of the Act, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R. Part 63, Subpart FFFF, the National Emission Standards for Hazardous Air Pollutants (HAPs): Miscellaneous Organic Chemical Manufacturing; and 40 C.F.R. Part 63, Subpart UU, the National Emissions Standards for Equipment Leaks – Control Level 2, at your Sauget, Illinois facility.

We have several enforcement options under Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3). These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

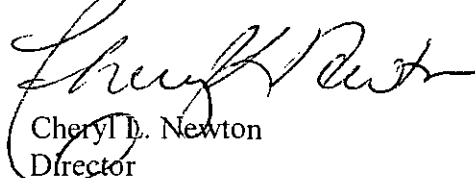
We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you the opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Ray Cullen. You may call him at (312) 886-0538 to request a conference. You should make the request within 10 calendar days following receipt of

this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,



Cheryl D. Newton
Director
Air and Radiation Division

Enclosure

cc: Ray Pilapil, Manager
Bureau of Air
Compliance and Enforcement Section
Illinois Environmental Protection Agency

Jeffrey N. Quinn, President
Solutia Inc.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

Solutia Inc.
Sauget, Illinois

Proceedings Pursuant to the Clean Air Act,
42 U.S.C. §§ 7401 et seq.

)
)
) **FINDING OF VIOLATION**
) **EPA-5-11-IL-15**
)
)
)
)

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that Solutia Inc. (Solutia) is violating Section 112 of the Clean Air Act (the Act), 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R. Part 63, Subpart FFFF, the National Emission Standards for Hazardous Air Pollutants (HAPs): Miscellaneous Organic Chemical Manufacturing (the MON regulations); and 40 C.F.R. Part 63, Subpart UU, the National Emissions Standards for Equipment Leaks – Control Level 2, at its Sauget, Illinois facility, as follows:

Statutory and Regulatory Authority

- 1) Section 112(d) of the Act, 42 U.S.C. § 7412(d), authorizes EPA to promulgate regulations for particular industrial sources that emit one or more of the HAPs listed in Section 112(b) of the Act, 42 U.S.C. § 7412(b), in significant quantities.
- 2) Pursuant to Section 112(d) of the Act, 42 U.S.C. § 7412(d), EPA promulgated Subpart UU on June 29, 1999, 64 Fed. Reg. 34899 (June 29, 1999).
- 3) Pursuant to Section 112(d) of the Act, 42 U.S.C. § 7412(d), EPA promulgated the MON regulations on November 10, 2003, 68 Fed. Reg. 63888 (November 10, 2003). The owner or operator of an existing affected source as of November 10, 2003 must comply with the provisions of this subpart no later than May 10, 2008, as required under 40 C.F.R. § 63.2445(b).
- 4) The MON regulations, at 40 C.F.R. § 63.2440, apply to each miscellaneous organic chemical manufacturing affected source, which is the facility-wide collection of miscellaneous organic chemical manufacturing process units (MCPUs) and heat exchange systems, wastewater, and

waste management units that are associated with manufacturing materials described in 40 C.F.R. § 63.2435(b)(1).

- 5) The MON regulations, at 40 C.F.R. § 63.2435(a), apply to owners or operators of MPCUs that are located at, or are part of, a major source of HAP emissions as defined in Section 112(a) of the Act, 42 U.S.C. § 7412(a).
- 6) The MON regulations, at 40 C.F.R. § 63.2435(b), state that an MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in 40 C.F.R. § 63.2550, that a) produces an organic chemical classified using the 1987 version of Standard Industrial Classification (SIC) code 282, 283, 284, 285, 286, 287, 289, or 386; an organic chemical classified using the 1997 version of North American Industry Classification System (NAICS) code 325; quaternary ammonium compounds and ammonium sulfate produced with caprolactam; hydrazine; or organic solvents classified in any of the SIC or NAICS codes previously listed that are recovered using non-dedicated solvent recovery operations; b) processes, uses, or generates any of the organic HAP listed in Section 112(b) of the Act or hydrogen halide and halogen HAP, as defined in 40 C.F.R. § 63.2550; and c) is not an affected source or part of an affected source under another subpart in Part 63, except for process vents from batch operations within a chemical manufacturing process unit, as identified in 40 C.F.R. § 63.100(j)(4). The MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described above.
- 7) The MON regulations, at 40 C.F.R. § 63.2480(a), state that the owner or operator of an affected source must meet each requirement in Table 6 to this subpart that applies to its equipment leaks, except as specified in paragraphs (b) through (d) of this section.
- 8) The MON regulations, at 40 C.F.R. § 63.2550, define “equipment” as each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.
- 9) The MON regulations, at 40 C.F.R. § 63.2550, define “in organic HAP service” as a piece of equipment that either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of 40 C.F.R. § 63.180(d).
- 10) Table 6 to the MON regulations states that for all equipment that is in organic HAP service, the owner or operator of an affected source must either comply with the requirements of Subpart UU or Subpart H of Part 63 and the requirements referenced therein, except as specified in 40 C.F.R. §§ 63.2480(b) and (d), or comply with the requirements of Subpart F of Part 65 and the requirements referenced therein, except as specified in 40 C.F.R. §§ 63.2480(c) and (d).

- 11) Subpart UU, at 40 C.F.R. § 63.1024(a), requires the owner or operator of an affected source to repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in paragraphs (d) and (e) of this section.
- 12) Subpart UU, at 40 C.F.R. § 63.1033(b), requires each open-ended valve or line to be equipped with a cap, blind flange, plug, or second valve.
- 13) Subpart UU, at 40 C.F.R. § 63.1020, defines an open-ended valve or line as any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.

Findings of Fact

- 14) Solutia owns and operates a chemical intermediate manufacturing facility at 500 Monsanto Avenue, Sauget, Illinois (the facility).
- 15) Solutia emits methyl isobutyl ketone and chlorine in a combined quantity of over 25 tons per year, and is thus a major source of HAP emissions as defined in Section 112(a) of the Act, 42 U.S.C. § 7412(a).
- 16) The facility contains two MCPUs as that term is defined at 40 C.F.R. § 63.2435(b): the Santoflex process unit and the ACL process unit. The equipment leak standards of the MON regulations apply only to the Santoflex process unit because it contains equipment that is in organic HAP service, as that term is defined at 40 C.F.R. § 63.2550.
- 17) The Santoflex process is a batch process consisting of two similar lines that manufacture rubber antidegradants.
- 18) EPA inspected the facility on August 4-6, 2009 for compliance with the equipment leak standards of the MON.
- 19) After the inspection, Solutia provided EPA with Leak Detection and Repair monitoring data from May 2008 through April 2010 from its database.
- 20) The monitoring data indicate that Solutia found pump 7041 to be leaking on October 16, 2008 but did not successfully repair it until November 7, 2008. Solutia did not place this pump on delay of repair.
- 21) During the inspection, EPA discovered seven open-ended lines in the Santoflex process unit without a cap, blind flange, plug, or second valve, identified as the line between valves 6101 and 6108 and the line off of valve 6038 in Line 1, and the lines off of valves 6022, 6029, 7595, 7891, and tank 463 in Line 2. Tank 463 had a bucket with product hanging nearby, which is regarded as an open-ended line.

Violations

- 22) Solutia failed to repair a leaking pump subject to the MON equipment leak standards within 15 days of when a leak was detected, in violation of 40 C.F.R. § 63.1024(a) and 40 C.F.R. § 63.2480(a).
- 23) Solutia failed to equip each open-ended line subject to the MON equipment leak standards with a cap, blind flange, plug, or second valve, in violation of 40 C.F.R. § 63.1033(b) and 40 C.F.R. § 63.2480(a).

Environmental Impact of Violations

- 24) Violation of the NESHAP standards can result in excess HAP emissions that may cause serious health effects, such as birth defects and cancer, and harmful environmental and ecological effects. Acute exposure to methyl isobutyl ketone may irritate the eyes and mucous membranes, and cause weakness, headache, nausea, lightheadedness, vomiting, dizziness, incoordination, and narcosis in humans. Chronic exposure to methyl isobutyl ketone has been observed to cause nausea, headache, burning in the eyes, weakness, insomnia, intestinal pain, and slight enlargement of the liver. Chlorine is a potent irritant to the eyes, the upper respiratory tract, and lungs.

Date

5/31/11

Cheryl L. Newton

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Finding of Violation, No. EPA-5-11-IL-15, by

Certified Mail, Return Receipt Requested, to:

Justin Prien
Environmental Manager
Solutia Inc.
W.G. Krummrich Plant
500 Monsanto Avenue
Sauget, Illinois 62206-1198


and

Jeffrey N. Quinn
President
Solutia Inc.
575 Maryville Centre Drive
Saint Louis, Missouri 63166

I also certify that I sent copies of the Finding of Violation by first class mail to:

Ray Pilapil, Manager
Bureau of Air
Compliance and Enforcement Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

on the 1st day of June, 2011.


Betty Williams
Administrative Program Assistant
Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7666 6176

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7666 6169